## **Recently Published Papers & Articles**

**November 7, 2020** 

<u>Is the Image on the Shroud of Turin "The Father's Witness"? (1 John 5:5-13)</u> by Larry Stalley – Academia.edu – October 28, 2020. (This paper will be permanently archived on the Religion and Philosophy page of this site). Here is the abstract:

"What exactly did the Biblical writer mean when he spoke of "the testimony (or witness) that God testified concerning His Son" (1 Jn 5.10)? Could the Shroud of Turin be the answer to this puzzling passage with its perplexing questions? If the Shroud of Turin is authentic then it is the most significant and the most incredible object on the planet, for it would be the miraculous testimony of the Father down through the ages to the truth of the Gospel story!"

<u>Have There Been Multiple Secret C-14 Tests on the Shroud of Turin?</u> by **Joseph G. Marino** – Academia.edu – October 12, 2020. Here is an excerpt from the introduction:

"Some people are aware that there was a putative secret C-14 test on the Shroud performed in 1982 on a thread of the so-called "Raes sample" extracted from the Shroud in 1973. (It was named after the late Belgian textile expert Prof. Gilbert Raes.) However, there are very few people who are aware that there may have been at least two other secret C-14 testings of the Shroud. Also little known are the facts that many more Shroud samples exist than previously thought, and that the number and provenance of at least some of the "Raes samples" are open to questions. Of course, the more samples that existed, the more chance there was that individuals would try to date them. The politics and intrigue here are a subset of what I have documented in my eight-hundred-page book, "The 1988 C-14 Dating of the Shroud of Turin: A Stunning Exposé'..."

An examination of art created in the 10<sup>th</sup> Century in Constantinople; the mystery of the Narthex mosaic, and the Shroud of Turin by Pam Moon – Academia.edu – October 8, 2020. Here is an excerpt from the introduction:

"This paper looks at the Christocentric art created during the Macedonian renaissance which is specifically attributed to Constantine VII, Romanos II and Basil Lekapenos. It compares it to the Shroud of Turin. Dated to the years after Constantine VII succeeded Romanos I, (945-985), this rich art must have been influenced by the Image of Edessa, also called the Holy Mandylion, an image of Christ 'not-made-by-hands,' which arrived in Constantinople on August 16<sup>th</sup> 944 AD. The 10<sup>th</sup> century image, right, shows the 1<sup>st</sup> century King Abgar V, possibly modelled on Constantine VII, holding the Image of Edessa..."

An important new paper titled, Revisione propositiva dei risultati di radio-datazione della Sindone di Torino by Paolo Di Lazzaro, Anthony C. Atkinson, Paola Iacomussi, Marco Riani, Marco Ricci and Peter Wadhams was recently published in Italian in Rapporto Tecnico ENEA, RT/2020/2/ENEA. It appears that a condensed version was then published in English titled, Statistical and Proactive Analysis of an Inter-Laboratory Comparison: The Radiocarbon Dating of the Shroud of Turin in the journal Entropy, Volume 2, Issue 9, 24 August 2020. Consequently, we are including links to both versions. Since we often emphasize the importance of peer review, we are also including a link to the Peer-review Record and Reviewer's Comments on this paper along with the authors' responses. Here is the abstract from the English version:

"We review the sampling and results of the radiocarbon dating of the archaeological cloth known as the Shroud of Turin, in the light of recent statistical analyses of both published and raw data. The statistical analyses highlight an inter-laboratory heterogeneity of the means and a monotone spatial variation of the ages of subsamples that suggest the presence of contaminants unevenly removed by the cleaning pretreatments. We consider the significance and overall impact of the statistical analyses on assessing the reliability of the dating results and the design of correct sampling. These analyses suggest that the 1988 radiocarbon dating does not match the current accuracy requirements. Should this be the case, it would be interesting to know the accurate age of the Shroud of Turin. Taking into account the whole body of scientific data, we discuss whether it makes sense to date the Shroud again."

This paper was deemed so important that the **International Center for the Shroud's Studies (CISS)** in Turin issued a rather rare, formal press release about it on September 1, 2020 (in both Italian and English) which we are including here titled, "**Dating of the Shroud of Turin**." (English translation starts on page 3).

<u>The Loros, the Epitaphios and the Shroud of Turin</u> by **Pam Moon** and **Joanne Bywater** – Academia.edu – July 22, 2020. Here is the introduction:

"The emperors of the Eastern Roman Empire, also known as the Byzantine Empire, chose to depict themselves wearing the loros, a long cloth which they wound around their body. The loros represented the burial shroud or winding sheet of Jesus. As this is such an unusual thing to imagine, it is possible that they had seen and had in their possession a cloth, which could be the burial cloth of Jesus. Although the loros was depicted at coronations and weddings it was actually worn on Easter Sunday and on the Feast of the Transfiguration in the presence of Saracen visitors. In Constantine VII Flavius Porphyrogenitus's description of the liturgy of Easter Sunday in The Book of Ceremonies; he described putting on the loroi and entering the sanctuary of Hagia Sophia. The sanctuary had a fourteen-foot long altar. Constantine reported personally changing the altar-cloth in the sanctuary on Good Friday and Easter Saturday; an act which would appear to be an unusual duty for an emperor. This altar-cloth liturgy may be the origins of the use of the Epitaphios in worship. Constantine also recounted kissing the raised tablion, a term associated with the altarcloth. Constantine VII and Romanos II created numerous artistic depictions of Jesus. The likeness of Jesus has resonance with the image of Jesus seen on the Shroud of Turin. This paper argues that Constantine VII protected and venerated the Shroud of Turin, and attributed his authority to rule to its existence."

<u>Shroud of Turin: C-14 Arizona 2 Sample Revised Zone Of Collection</u> by **David R. Maier** – Academia.edu – July 12, 2020. Here is the introduction:

"In researching the Shroud of Turin it has been observed that the Carbon 14 (C-14) Arizona secondary sample was not cut from the Reserve Sample's inboard end (area towards the main body of the Shroud) as is currently held (shown in dotted red lines immediately below), but was cut from the outboard area (area that was closest to the edge of the Shroud)."

On Radiocarbon Dating of the Shroud of Turin by Thomas McAvoy – Researchgate.net – July 2020. Here is the abstract:

"This paper examines Phillips' hypothesis that neutron radiation from the body of the person wrapped in the Shroud of Turin could have altered its radiocarbon dating results. In an earlier paper it is shown that uv fluorescence intensity is highly non-uniform over the surface of the Shroud. The Shroud's uv fluorescence intensity spatial variations very closely match the spatial radiocarbon dating variations calculated by Rucker in his MCNP simulation of Phillips' hypothesis. Experimental results given here for neutron irradiated modern linen demonstrate that such radiation increases the fluorescence intensity of the linen. Previously published results on neutron radiation of modern linen show that it alters the radiocarbon dating of the linen. Thus, neutron radiation has the potential to explain both the Shroud's anomalous radiocarbon dating as well as its very unique uv fluorescence spatial properties. Suggestions for follow up research to assess the hypothesis studied here are discussed."

<u>The reddish color of bloodstains on the Shroud of Turin: investigation of two hypotheses</u> by **Kelly Kearse** – *Journal of Historical Archaeology & Anthropological Sciences*, Vol. 5, Issue 3, 2020 – June 16, 2020. Here is the abstract:

"One of the most intriguing examples of aged bloodstains on an archeological textile are those found on the Shroud of Turin, a controversial linen cloth bearing the image of a man with wounds corresponding to scourging and crucifixion. Previous studies have demonstrated that the bloodstains test positive for various blood components including hemoglobin, albumin, and immunoglobulin, indicating they are not merely paint or pigment; however, as noted by many who have examined the cloth, the bloodstains are more reddish than would be expected for aged blood. It has been suggested that the reddish color may be a consequence of a residual coating of Saponaria, a softening agent used in the processing of ancient linen that contains hemolytic properties. Alternatively, the reddish color has been proposed to result from a high bilirubin content in the blood, transferred from a body that had undergone severe physical trauma. Here, both hypotheses are examined to assess the effects of such circumstances on bloodstain color over time. No effect of hemolysis on bloodstain color was observed, although, unexpectedly, it was found that a reddish color did persist in blood added to material that had been pre-treated with glycerin. Bloodstains with a high bilirubin content were not found to maintain a reddish color, regardless of the specific form of bilirubin present. The implications of these studies for bloodstain evaluation on the Shroud of Turin are discussed."

Signos de Vida en la Figura de la Síndone de Turín (Signs of Life in the Figure of the Shroud of Turin) (En Español – Paper in Spanish - Abstract in English) by **Bernardo Hontanilla Calatayud, M.D., Ph.D.** – *Scientia et Fides*, Vol. 8(1)/2020. Here is the English Abstract:

"In this article several signs of life present in the Shroud of Turin are pointed out. Following the development of rigor mortis, the body posture of the image on the Shroud is analyzed. This, together with the presence of specific facial folds indicate that the person wrapped in it is alive. Therefore, the image on the Shroud of Turin shows both signs of death and life in a person whose image was imprinted when he was alive."

<u>The Shroud, Geology and the Rock of Ages</u> by **Fr. Erich Junger** – **Academia.edu** – 2019. Here is the Abstract:

"A literary evaluation of the soils, particles and geologic materials contained on the Shroud of Turin is performed through the lens of Forensic Geology and Provenance Determination. While the Shroud of Turin is not an item of forensic evidence per se, the use of forensic methodologies, particularly forensic geology, is useful provided that unreasonable expectations and conclusions are avoided. A review of the particle examinations performed by previous authors is considered, along with potential archaeological site comparisons made through the works of other researchers. Suggestions for future research are also considered."

<u>Shroud of Turin Fact Sheet</u> by **Brian Cray** – **Academia.edu** – 2016. This paper provides an overview of both the Shroud and the Sudarium of Oviedo. Here is the introduction:

"Much of the early story is fragmentary, some is only circumstantial, and some mere legend. Nonetheless, much of what we do know is clear, corroborated and documented history. It is a history that tells us that the Shroud of Turin and the Edessa Cloth are most likely one and the same piece of cloth."

[Editor's Note: I am often asked if all the STURP team members came to the same conclusions about the Shroud. My immediate answer is "no!" A perfect example and most notable is the work of our good friend Joseph S. Accetta, an original member of the STURP team who performed the Infrared spectroscopy experiments on the cloth in 1978. I am including here a selection of the papers he has written over the past several years that present his viewpoints on the Shroud. As I often state, if agreement were necessary for friendship in the world of the Shroud, no one would have any friends]!

<u>The Alleged Contamination Argument Regarding the Age of the Turin Shroud</u> by **Joseph S. Accetta** – **Academia.edu** – November 29, 2019. Here is the Abstract:

"In this short paper we examine the implications surrounding the contention by some investigators that the cloth sample that was radiocarbon dated in 1995 was contaminated by material from a later era. The resulting date as independently determined by 3 laboratories was approximately coincident with its known 14<sup>th</sup> century historical origins and thus conflicted with the widely held belief that the cloth was actually 2000 years old. The potential possibilities regarding the origins of this contamination are reviewed. An analysis shows that the amount of a more plausible and recent material required to affect the C14 concentration to this extent dwarfs the mass of the original sample. The other significant question that arises from this contamination conjecture is the probability that such a presumably random draw from a source of contamination mixed with the actual sample just happens to yield a date that is almost in perfect coincidence with its historical date. The paper concludes that contamination is highly unlikely and therefore there is correspondingly little scientific justification to subject the Shroud to another radiocarbon dating procedure."

<u>A Commentary on the Authenticity of the Shroud of Turin</u> by **Joseph S. Accetta** – **Academia.edu** – November 21, 2019. Here is the introduction:

"The cornerstone of any authenticity argument regarding the Shroud of Turin is its age. If it is 2000 years old then it is almost entirely inexplicable from a man-made process point of view and everyone, me included, might just as well call it a miracle and go home. Asserting that it is 2000 years old and then further asserting some physical mechanism for its creation by a dead body within a tomb requires the positing of heretofore unknown physics and that, saying it very politely, is a most challenging proposition. Such claims do not bode well for the reputation of Shroud science in general and those who regard themselves as Shroud scientists should be wary of their long term effects. Given these appeals to non-existent physics, it should relatively easy to explain the resurrection of Lazarus as well."

<u>Origins of a 14th Century Turin Shroud Image</u> by **Joseph S. Accetta** – Academia.edu – November 15, 2014. Here is the Abstract:

"This paper is based on the assumption that the Shroud of Turin is of 14<sup>th</sup> century origin consistent with its radiocarbon date and historical record and thus must be explained within the technology, social and cultural and contexts of that era. Avoiding the attendant controversy surrounding the date, we present a reasonable plausibility argument to reconcile its visual and forensic properties with extent 14<sup>th</sup> century printing technology and other related circumstances. We show that striking parallels exist between the general characteristics of an environmentally degraded woodprint and the Shroud image including the pseudo 3-d properties which arise as a natural and unintentional result of the printing process. Existing examples are shown of large woodprints of that era with sufficient detail and contrast variations that resemble the Shroud image resolution and contrast variation. Further the argument is reinforced with analytical results showing that under any reasonable assumptions about the surface bi-directional reflectance distribution function (BRDF) the observed 3-d properties cannot be reconciled with any known radiative imaging process."

## **STUDENT PAPERS**

What is the importance of Shroud Science to Faith? (In English) by Dr. Paola Conti Puorger – Ateneo Pontificio Regina Apostolorum, Istituto Scienza e Fede – June 19, 2020. Dr. Puorger also kindly provided us with versions In italiano and En Español.